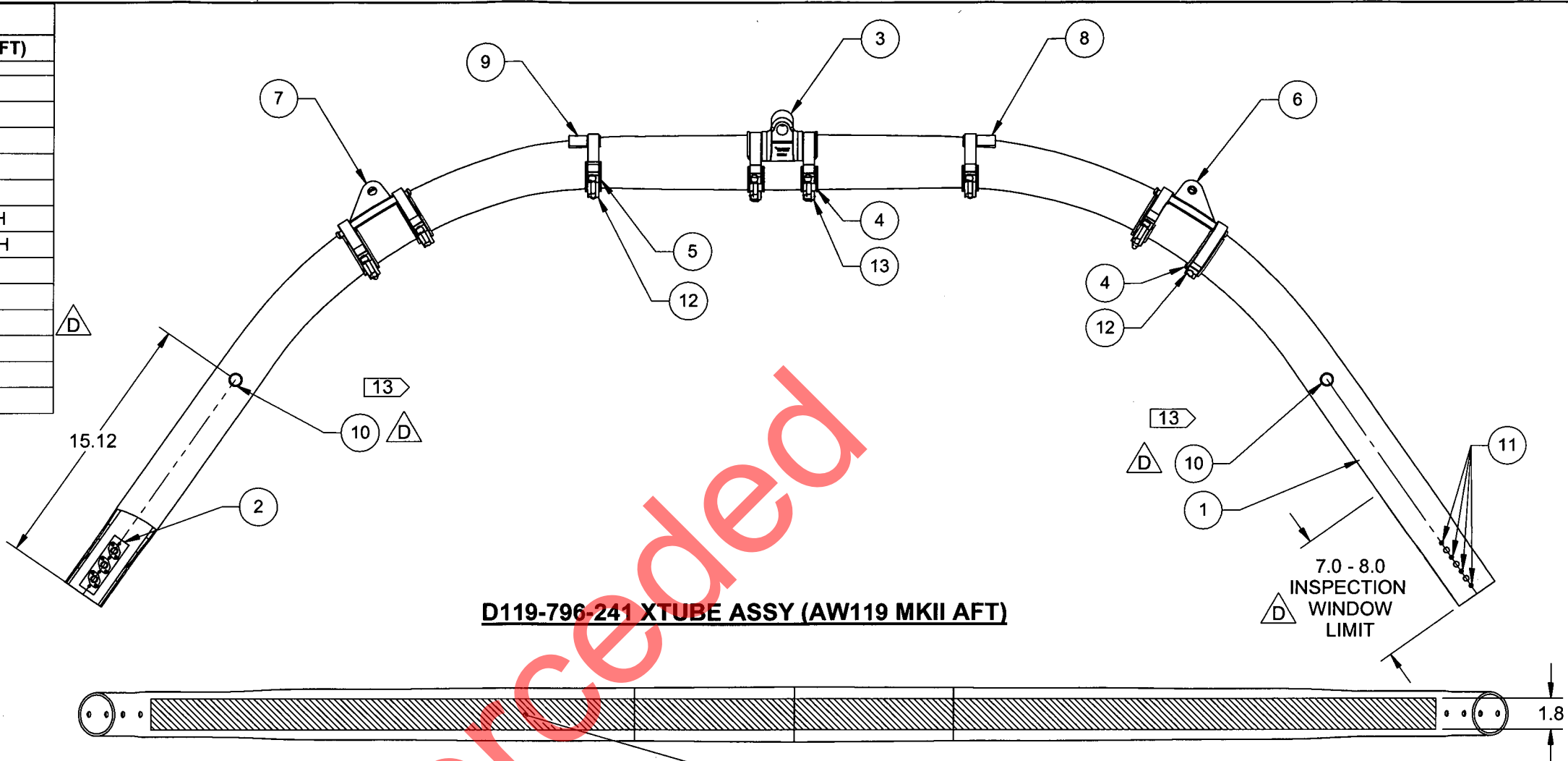


ITEM	QTY	P/N	DESCRIPTION
	X	D119-796-241	XTUBE ASSY (AW119 MKII AFT)
1	1	D119-796-241BND	CROSSTUBE, AFT
2	4	D2873-043	RADIUS BLOCK
3	1	D5122-1	CENTER SUPPORT
4	6	D5123-1	CLAMP CUSHION
5	2	D5123-5	CLAMP CUSHION
6	1	D5134-041	DAMPER SUPPORT ASSY, LH
7	1	D5134-042	DAMPER SUPPORT ASSY, RH
8	1	D5136-1	CONTACT PAD, LH
9	1	D5136-2	CONTACT PAD, RH
10	2	D5150-3	STEP POST
11	16	CR3212-4-07	RIVET, BLIND CSK
12	6	MS21920-25	CLAMP
13	2	MS21920-28	CLAMP



D119-796-241 XTUBE ASSY (AW119 MKII AFT)

NOTES:

- MATERIAL: N/A
- FINISH: MASK UNDERSIDE OF CROSSTUBE AS SHOWN (B3-1, HATCHED AREA) PAINT OUTSIDE PER DART QSI 005 4.2 REMOVE MASKING AND APPLY MATTE CLEAR COAT
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: IDENTIFY USING PART NUMBER "D119-796-241" AND BATCH NUMBER ON INSIDE OF CUFF PER QSI 044 6.4
- WEIGHT: 26.26 lbs
- EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM DEFECTS SUCH AS SCRATCHES, NICKS OR DENTS. DEFECTS UP TO 0.005 MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- INSTALL D5122-1 CENTER SUPPORT AT 8.4° OFFSET FROM THE CROSSTUBE BENDING PLANE USING A 0.04" TO 0.07" THICK LAYER OF SCOTCH-WELD DP460 PER QSI 015. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER DP460 HAS CURED FOR 24 HOURS.
- AFTER FINISHING, ABRABE MATING SURFACES OF D5136-1/-2 AND SURFACE OF CROSSTUBE WITH 180 GRIT SANDPAPER AND REMOVE RESIDUE WITH DUPONT 4105S WASH 'N' WIPE DEGREASER. APPLY A 0.100" MIN THK LAYER OF PROSEAL 890 ON THE INSIDE CONCAVE SURFACE OF THE D5136-1/-2 CONTACT PADS AND INSTALL AT AN 8.4° OFFSET FROM THE CROSSTUBE BENDING PLANE. INSTALL MS21920-25 CLAMPS AND D5123-1 CLAMP CUSHIONS WHILE WET. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.
- TORQUE MS21920 CLAMPS 80 - 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY, THE NUT HAS NOT BOTTOMED-OUT AFTER TORQUING AND THE NUT IS FACING AFT.
- AFTER FINISHING, POSITION AND INSTALL D5134-041/-042 DAMPER SUPPORTS USING JIG DT10085. ABRABE MATING SURFACES OF THE D5134-041/-042 DAMPER SUPPORTS AND CROSSTUBE WITH 180 GRIT SANDPAPER AND REMOVE RESIDUE WITH DUPONT 4105S WASH 'N' WIPE DEGREASER. APPLY A 0.100" MIN THK LAYER OF PROSEAL 890 ON THE INSIDE CONCAVE SURFACE OF THE D5134-041/-042. INSTALL MS21920-25 CLAMPS AND D5123-1 CLAMP CUSHIONS WHILE WET. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.
- PRIOR TO FINISHING, ABRABE MATING SURFACES OF CROSSTUBE WITH 180 GRIT SANDPAPER AND REMOVE RESIDUE WITH DUPONT 4105S WASH 'N' WIPE DEGREASER. INSTALL D5150-3 WITH LAYER OF PROSEAL 890 ON INSIDE CONCAVE SURFACE, 0.100" MIN THK LOCATE D5150-3 USING TOOL DT10112.

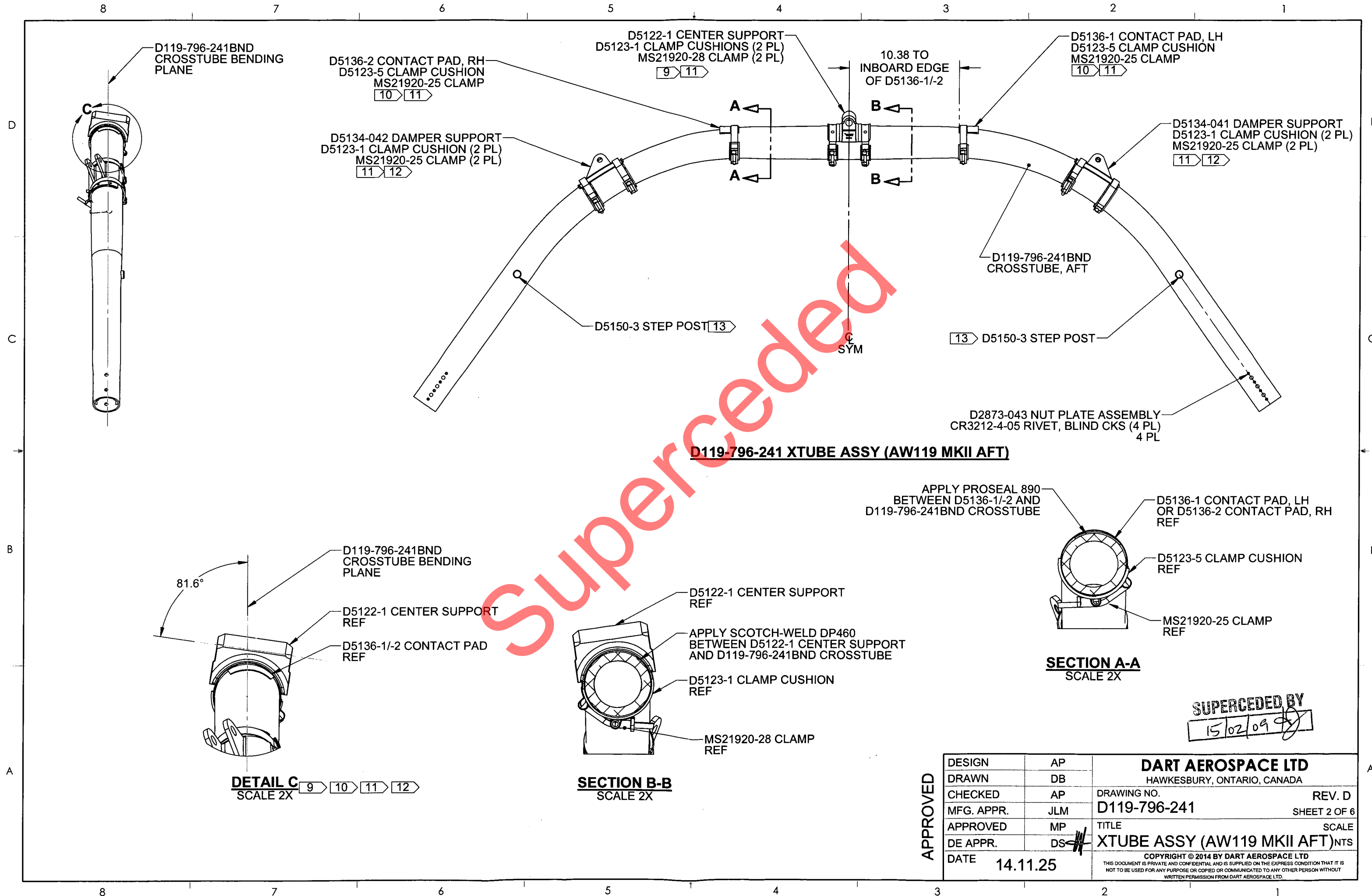
MASK AREA PRIOR TO PAINTING
REMOVE MASKING AFTER PAINTING
AND APPLY CLEAR COAT

SUPERCEDED BY

15/02/09

D	ADD D5150-3 STEP POST (2X), MOVED INSPECTION WINDOW DETAIL TO SHT 1, MODIFIED NOTES ON SH 1& 3	DB	14.11.25
C	CR3212-4-07 RIVETS WAS CR3212-4-05 RIVETS, RADIUS BLOCK WAS NUT PLATE ASSEMBLY (BOM), REMOVED 7.5 DEG CUFF HOLE OFFSET (A1-3), REDUCED CUFF DIA TO 2.500 (C8-5), ADD INSPECTION WINDOW	AP	14.10.23
B	ORIENTATION OF D5122-1 CENTER SUPPORT WAS CORRECTED. D5123-5 ADDED UNDER D5136-1/-2 CONTACT PADS. ADDED D2873-043 NUT PLATE ASSY & CR3212-4-05 RIVETS. ADDED REFERENCE TO SKIDTUBES FOR LOCATING CUFF HOLES. RE-ORGANIZED NOTES, REMOVED REDUNDANT INFORMATION.	AP	14.09.08
A	NEW ISSUE	AP	14.08.07
REV.	DESCRIPTION		DATE
DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	AP	DRAWING NO. REV. D	
MFG. APPR.	JLM	D119-796-241 SHEET 1 OF 6	
APPROVED	MP	TITLE SCALE	
DE APPR.	DS	XTUBE ASSY (AW119 MKII AFT) NTS	
DATE	14.11.25	COPYRIGHT © 2014 BY DART AEROSPACE LTD	
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APPROVED



D119-796-241BND
CROSSTUBE BENDING
PLANE

D5136-2 CONTACT PAD, RH
D5123-5 CLAMP CUSHION
MS21920-25 CLAMP
10 11

D5134-042 DAMPER SUPPORT
D5123-1 CLAMP CUSHION (2 PL)
MS21920-25 CLAMP (2 PL)
11 12

D5122-1 CENTER SUPPORT
D5123-1 CLAMP CUSHIONS (2 PL)
MS21920-28 CLAMP (2 PL)
9 11

10.38 TO
INBOARD EDGE
OF D5136-1/-2

D5136-1 CONTACT PAD, LH
D5123-5 CLAMP CUSHION
MS21920-25 CLAMP
10 11

D5134-041 DAMPER SUPPORT
D5123-1 CLAMP CUSHION (2 PL)
MS21920-25 CLAMP (2 PL)
11 12

D119-796-241BND
CROSSTUBE, AFT

D5150-3 STEP POST 13

13 D5150-3 STEP POST

D2873-043 NUT PLATE ASSEMBLY
CR3212-4-05 RIVET, BLIND CKS (4 PL)
4 PL

D119-796-241 XTUBE ASSY (AW119 MKII AFT)

APPLY PROSEAL 890
BETWEEN D5136-1/-2 AND
D119-796-241BND CROSSTUBE

D5136-1 CONTACT PAD, LH
OR D5136-2 CONTACT PAD, RH
REF

D5123-5 CLAMP CUSHION
REF

MS21920-25 CLAMP
REF

SECTION A-A
SCALE 2X

81.6°

D119-796-241BND
CROSSTUBE BENDING
PLANE

D5122-1 CENTER SUPPORT
REF

D5136-1/-2 CONTACT PAD
REF

D5122-1 CENTER SUPPORT
REF

APPLY SCOTCH-WELD DP460
BETWEEN D5122-1 CENTER SUPPORT
AND D119-796-241BND CROSSTUBE

D5123-1 CLAMP CUSHION
REF

MS21920-28 CLAMP
REF

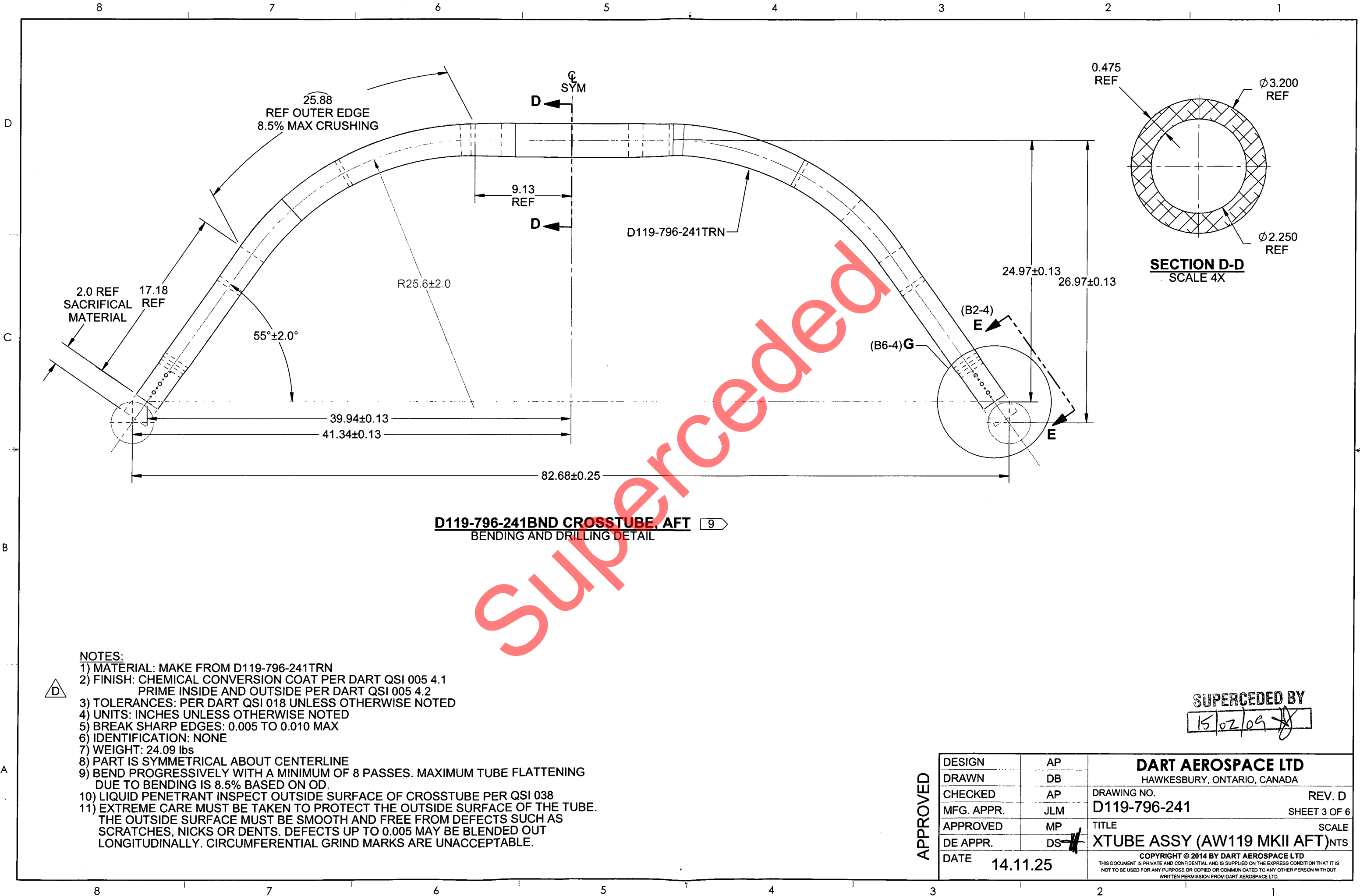
SECTION B-B
SCALE 2X

DETAIL C
SCALE 2X 9 10 11 12

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15/02/09

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DESIGN	AP	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.	JLM	D119-796-241	SHEET 2 OF 6
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	XTUBE ASSY (AW119 MKII AFT)	NTS
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D119-796-241BND CROSSTUBE, AFT 9
BENDING AND DRILLING DETAIL

NOTES:

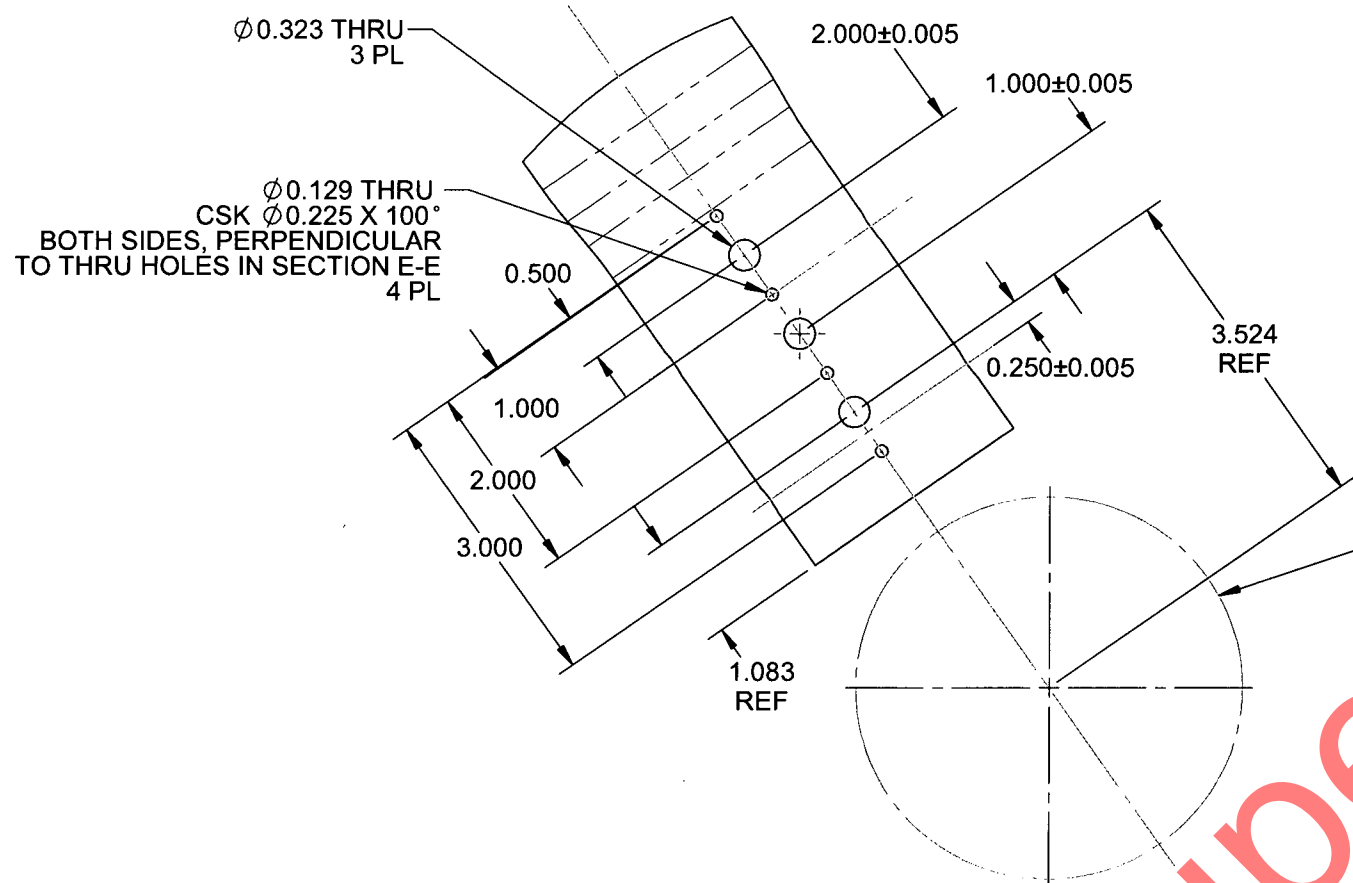
- 1) MATERIAL: MAKE FROM D119-796-241TRN
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 24.09 lbs
8) PART IS SYMMETRICAL ABOUT CENTERLINE
9) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING
DUE TO BENDING IS 8.5% BASED ON OD.
10) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038
11) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE.
THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM DEFECTS SUCH AS
SCRATCHES, NICKS OR DENTS. DEFECTS UP TO 0.005 MAY BE BLENDED OUT
LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

SUPERCEDED BY

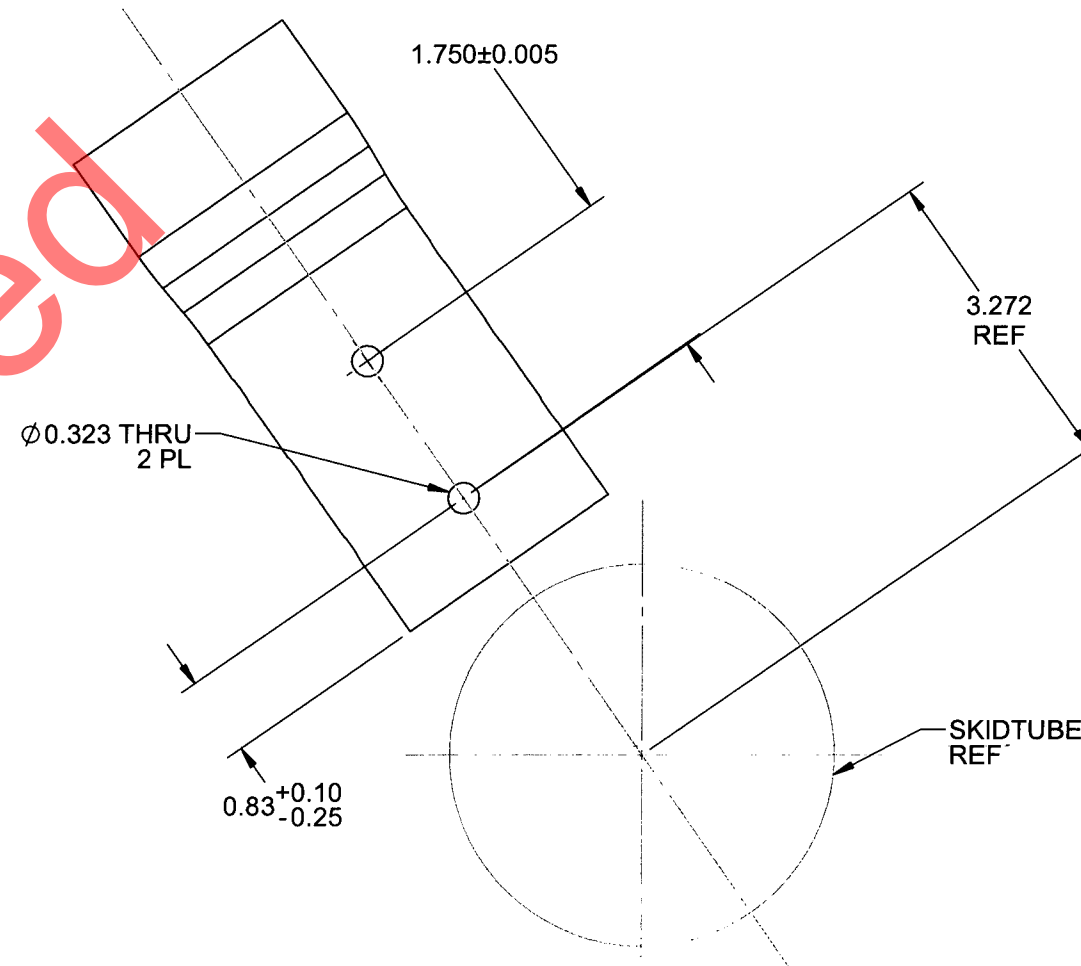
15/02/09

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DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.	JLM	D119-796-241	SHEET 3 OF 6
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	XTUBE ASSY (AW119 MKII AFT)	NTS
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DETAIL G (C3-3)
SCALE 2X

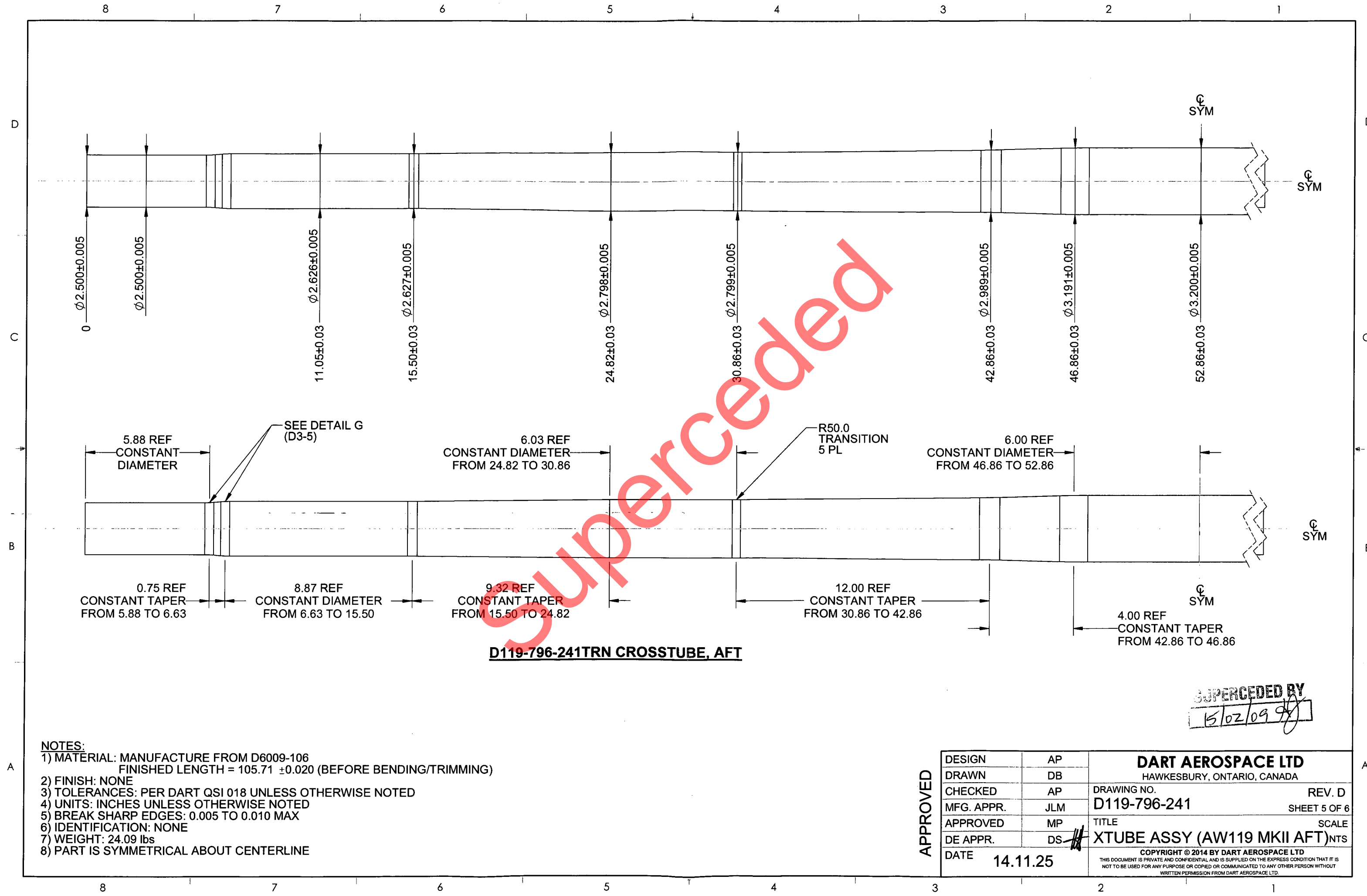


SECTION E-E (C3-3)
SCALE 2X

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DESIGN	AP	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	DB		
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.	JLM	D119-796-241	SHEET 4 OF 6
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	XTUBE ASSY (AW119 MKII AFT)	NTS
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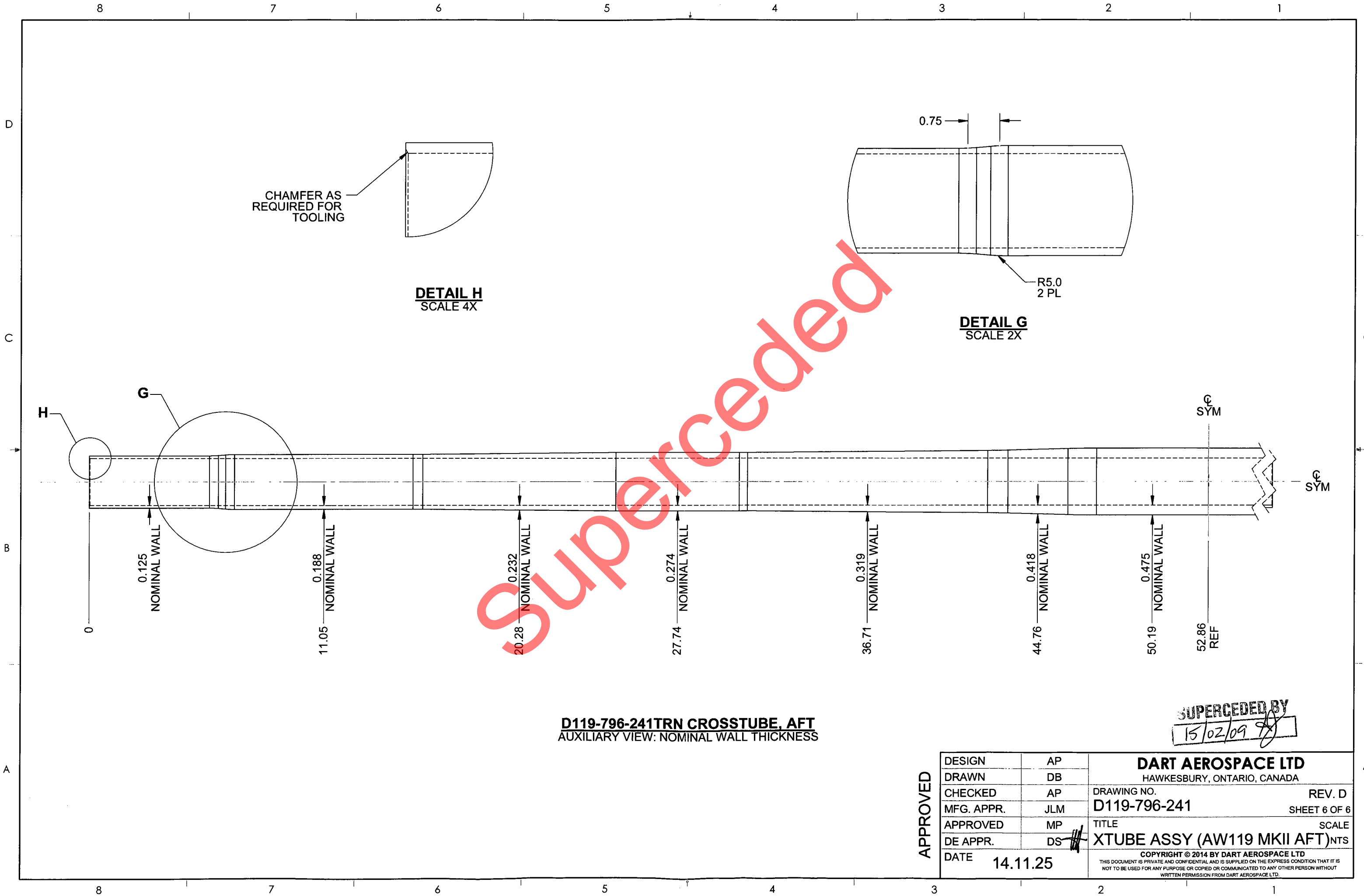
D119-796-241TRN CROSSTUBE, AFT

SUPERCEDED BY
15/02/09

- NOTES:**
- 1) MATERIAL: MANUFACTURE FROM D6009-106
FINISHED LENGTH = 105.71 ±0.020 (BEFORE BENDING/TRIMMING)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 24.09 lbs
 - 8) PART IS SYMMETRICAL ABOUT CENTERLINE

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DESIGN	AP	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.	JLM	D119-796-241	SHEET 5 OF 6
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	XTUBE ASSY (AW119 MKII AFT)	NTS
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D119-796-241TRN CROSSTUBE, AFT
AUXILIARY VIEW: NOMINAL WALL THICKNESS

APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	AP	DRAWING NO. D119-796-241	REV. D
MFG. APPR.	JLM	SHEET 6 OF 6	
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	XTUBE ASSY (AW119 MKII AFT)NTS	
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